

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

July 3, 2002

Commander, Atlantic Division
Naval Facilities Engineering Command
Environmental Quality Division
Code: 1823
Norfolk, Virginia 23511-6287
Attn: Mr. Dominic O'Connor

SUBJECT: Review of Draft HHRA Methods Sites 1
Allegany Ballistics Laboratory, Rocket Center, West Virginia

Dear Mr. O'Connor:

The EPA has reviewed the draft Proposed Methods for Preparing the Human Health Risk Assessment (HHRA) Site 1, Allegany Ballistics Laboratory. The following comments are provided for consideration.

- 1 A new version of RAGS D guidance (Final 2001) is out now. Please consider using the new guidance for future risk assessments.
- 2 Note that when CT intakes are calculated only for risk drivers, it creates a problem later on for RAGS Tables 9s and 10s because a complete summary can not be provided. Please consider calculating CT intakes for all pathways.
- 3 Table 1. If it is likely that fishing will occur onsite, you may want to consider doing a risk assessment for the fish pathway (e.g., animal tissue).
- 4 Table 4s.

It is not clear how the soil-to-skin adherence factors were calculated for the child and adolescent. In some cases, the surface area body parts without soil-to-skin adherence factors were erroneously included in the calculation for the weighted adherence factors. Note also that surface areas should be kept constant for the RME and CT exposure scenarios. It is appropriate, however, to change the soil-to-skin adherence factors. Please refer to the draft Dermal guidance-RAGS E-2001 for further recommendation on the appropriate surface areas and soil-to-skin adherence factors to use in the calculation of the weighted adherence factors. Separate tables should be presented for the volatile and particulate emissions pathways.

It may be more appropriate to use the reed gatherer (tidal flats) for the recreational scenario, not the gardener. It is not clear why the gardener was chosen.

Table 4.1-Dermal. The soil-to-skin adherence factor value is not in the table.

5 Attachment: Soil-to-Air SSLs

The Q/C for the particulate SSLs should also be site-specific, i.e., based on Harrisburg, as was done for the volatile SSLs.

If you have any questions concerning any of these comments, please call me (215) 814-3364.

Sincerely,



Bruce W. Beach
Remedial Project Manager

cc: Tom Bass, WV DEP
Brett Doerr, CH2M Hill
Lou Williams, NAVSEA
John Aubert, NAVSEA
David McBride, NAVSEA